

REMARKS/ARGUMENTS

The present Amendment is in response to the Office Action having a mailing date of April 25, 2005. Claims 1-31 are pending in the present Application. Applicant has amended claims 5 and 8. Consequently, claims 1-31 remain pending in the present Application.

In the above-identified Office Action, the Examiner indicated that claims 6-7 and 9-12 would be allowable if rewritten or amended to be in independent form incorporating the limitations of the base claim and any intervening claims. Applicant gratefully appreciates the Examiner's indication that claims 6-7 and 9-12 would be allowable. In the above-identified Office Action, the Examiner indicated that claims 16-31 were allowed. Applicant gratefully appreciates the Examiner's indication that claims 16-31 are allowed.

In the above-identified Office Action, the Examiner rejected claims 1-5, 8, 13-15 under 35 U.S.C. § 102 as being anticipated by U.S. Patent Publication No. 2004/0061981 (Covington). In so doing, the Examiner cited Fig. 7 of Covington. More specifically, the Examiner cited item 62 as corresponding to the first free layer and item 66 as corresponding to the second free layer. The Examiner did not specifically indicate which portions of Fig. 7 of Covington correspond to the recited first, second, and third terminals.

Applicant respectfully disagrees with the Examiner's rejection. Claim 1 recites a magnetic memory device that includes three terminals, a spin transfer driven element including a first free layer, and a readout element including a second free layer. The spin transfer driven element is recited to be disposed between the first and second terminals. The readout element is disposed between the second and third terminals. Claim 1 also recites that a magnetization reversal of the first free layer within the spin transfer driven element magnetostatically causes a magnetization reversal of the second free layer in the readout element. As a result, a suitable write current may

be driven through the spin transfer driven element, while a suitable read current may driven through the read element. Specification, page 16, lines 12-17. Consequently, the large write current may not flow through the read element. Specification, page 16, lines 17-19. Moreover, a maximum voltage that long-term reliability allows may be applied to the read element. Specification, page 16, lines 19-21.

In contrast, Covington fails to teach a magnetic memory device that has three terminals, that has spin transfer and readout elements, that has two free layers, or in which the first free layer is between the first and second terminals and the second free layer is between the second and third terminals. First, Covington teaches the use of only two terminals. Fig. 7 of Covington, cited by the Examiner, includes only *two* terminals on the magnetic device 60. One terminal is clearly shown as being connected to the top layer 62, while the other terminal appears to be connected to the bottom terminal 72. Thus, the device of Covington is simply does not include three terminals. Second, the device of Covington does not include separate spin transfer and readout elements. Fig. 7 of Covington depicts a single magnetic element including a single free layer, with two pinned layers 62 and 70 (a synthetic antiferromagnet). Covington, paragraph 41. Thus, the device of Covington is a single device: a dual spin valve. Third, the device of Covington does not include the recited first and second free layers. As expressly stated in the reference, the layer 62 (cited by the Examiner as the first free layer) is actually a pinned layer. Covington, paragraph 41, lines 4-5. The device of Covington thus includes only a single free layer 66. Covington, paragraph 41, lines 4-6. Moreover, even if Applicant were to assume, *arguendo*, that the layer 62 is a free layer (a proposition to which Applicant disagrees), both layers 62 and 66 are between the same two terminals. Consequently, the device of Covington would still fail to include the recited first and second free layers. Moreover, as there is only one

free layer in Covington, there is no indication in Covington that a magnetization reversal of the first free layer within the spin transfer driven element magnetostatically can or should cause a magnetization reversal of the second free layer in the readout element. Consequently, for the above-identified reasons, Covington fails to teach or suggest many of the elements recited in claim 1. Accordingly, Applicant respectfully submits that claim 1 is allowable over the cited references.

Claims 2-5, 8, and 13-15 depend upon independent claim 1. Consequently, the arguments herein apply with full force to claims 2-5, 8, and 13-15. Accordingly, Applicant respectfully submits that claims 2-5, 8, and 13-15 are allowable over the cited references.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,

SAWYER LAW GROUP LLP

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/Janyce R. Mitchell/ Reg. No. 40,095
Janyce R. Mitchell
Attorney for Applicant(s)
(650) 493-4540